

## ABSTRACT OF THE DISCLOSURE

Methods and compositions for detection of microbial contaminants in peritoneal dialysis solutions are provided. The methods and compositions employ modified bioburden testing and the detection of peptidoglycan. A novel cause of  
5 aseptic peritonitis is provided--aseptic peritonitis associated with gram positive microbial contamination of a dialysis solution. Peptidoglycan is a major component of a gram positive bacterial cell wall and thus can serve as a marker for gram positive bacteria. In this regard, testing for peptidoglycans can be utilized to effectively prevent peritonitis in patients that use the peritoneal dialysis solutions, such as  
10 peritoneal dialysis solutions that contain a glucose polymer including an icodextrin and the like.